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10/576,156	04/17/2006	**Kazunori Ozawa**	19734	2171

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,156	OZAWA, KAZUNORI	
	Examiner	Art Unit	
	PETER CHAU	2476	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-10,21,22,24-26 and 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-10, 21-22, 24-26 and 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of amendment filed on 7/24/2009. Claim(s) 1-2, 4-6, 8-10, 25 and 30 have not been amended. Claim(s) 7, 21-22, 24 and 26 were amended. Claim(s) 3, 11-20, 23 and 27-29 have been cancelled.

Response to Arguments

2. Examiner respectively withdraws the claim objections regarding claims 6-9, 21-24 and 26.

3. Examiner respectively withdraws the 112 1st paragraph rejection.

4. Applicant's arguments filed 7/24/2009 have been fully considered but they are not persuasive.

Applicant argues,

"While Harrell discloses an encoded bit rate, he does not teach or suggest an encoder receiving and encoding a medium signal, and the Examiner does not state otherwise" on pg. 11 lines 10-12 of the remarks.

Examiner respectively disagrees with the applicant. It is true that Harrell does not teach or suggest an encoder receiving and encoding a medium signal, however, the reference of Salokannel does teaches it and the examiner covered it with the citation of fig. 2 and paragraph [0027]. For further clarification, Salokannel, in fig. 2 and further explained in paragraph [0027], shows a coder 20, receiving data frames from an encryption 9 as

shown by an arrow going from encryption 9 to coder 20. The medium signal is thus the data frames going from encryption 9 and being received by coder 20 for encoding.

Applicant argues,

"the hypothetical combination of Salokannel and Harrell does not disclose or suggest a control unit for controlling an encoder unit that receives and encodes a medium signal" on pg. 11 lines 15-17.

Examiner respectively disagrees with the applicant. It is taught by Salokannel, as shown above, an encoder unit that receives and encodes a medium signal. The combination of Salokannel and Harrell teaches a control unit for controlling an encoder from the already cited lines/paragraphs of the references. Harrell teaches that a server changing encoding rates for outputting a media stream, col. 3 lines 36-53 and col. 14 lines 4-13. Although it is not explicitly stated in Harrell that there is a control unit for controlling an encoder unit, it is inherent that the server has a control unit to control an encoder for changing encoding rates.

Applicant argues,

"Mor does not teach or suggest either an encoder unit or an output control unit receiving the stream output from said encoder unit, said output control unit performing control to output the stream to the transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit" on pg. 12 lines 6-9

Examiner respectively disagrees with the applicant. Mor teaches, in col. 4 lines 19-27, that a node receives a notification and delays transmission. For clarification, a node contains a traffic processing block with bi-directional arrows going to and from traffic processing block, shown in fig. 3, and it processes outgoing data for transmission, col. 4 lines 33-35. A node does not immediately begin outgoing transmission until a specified waiting period has expired, col. 8 lines 1-5.

Applicant argues,
"Salokannel does not teach or suggest a control unit outputting a control signal based on a notification from a monitor unit, but contends that Kumaki discloses this feature"

Examiner respectively disagrees. Kumaki teaches, in col. 45 lines 45-50 and shown in fig. 25, that a mobile terminal detects a degradation of received signal strength and transmits a handoff request message based on the degradation. The mobile terminal inherently has a monitoring unit that monitors the received signal strength. In support, Kumaki teaches there is a management function that performs radio channel monitoring and handover related processing associated with radio quality change, col. 13 lines 17-22. Although Kumaki does not explicitly teach a control unit outputting a control signal based on a notification from a monitor unit, it is inherent that a mobile terminal has a control unit for performing functions of the mobile terminal to transmit the handoff request message based on the monitored degradation of a received signal.

Applicant argues,

"Kumaki does not teach or suggest a control unit outputting a control signal based on a notification from the monitor unit if the wireless reception status indicates a handoff status, as recited in independent claims 4 and 24" on pg. 12 line 23 to pg. 13 line 2.

Examiner respectively disagrees with the applicant. Kumaki teaches, in col. 45 lines 45-50 and shown in fig. 25, that a mobile terminal detects a degradation of received signal strength and transmits a handoff request message based on the degradation. Transmitting a handoff request message is based on a detection of a handoff status regarding a base station.

Applicant argues,

"the hypothetical combination of Salokannel and Harrel does not teach or suggest an encoder receiving and encoding a medium signal, and does not teach or suggest a control unit for controlling such an encoder" on pg. 13 lines 14-16.

Examiner respectively disagrees with the applicant. The reference of Salokannel does teach an encoder receiving and encoding a medium signal, explained in Salokannel, fig. 2 and paragraph [0027]. For further clarification, Salokannel, in fig. 2 and further explained in paragraph [0027], shows a coder 20, receiving data frames from an encryption 9 as shown by an arrow going from encryption 9 to coder 20. The medium

signal is thus the data frames going from encryption 9 and being received by coder 20 for encoding. Harrell teaches that a server changing encoding rates for outputting a media stream, col. 3 lines 36-53 and col. 14 lines 4-13. Although it is not explicitly stated in Harrell that there is a control unit for controlling an encoder unit, it is inherent that the server has a control unit to control functions of a server including an encoder for changing encoding rates.

Claim Objections

5. Claim(s) 26 is/are objected to because of the following informalities: change "via the transmission path" to "via the wired and/or wireless transmission path" on line 9. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 21-22 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 21-22 and 24 recites the limitation "said program" on line 3 of claims 21 and 22 and lines 3-4 of claim 24. There is insufficient antecedent basis for this limitation in the claim. Examiner will interpret this to be "said computer program" hereinafter for examination.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1, 6, 21, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2001/0006552 to Salokannel and in further view of U.S. Patent 7,274,661 to Harrell et al (hereinafter "Harrell").

As per claim 1, Salokannel teaches **a transmission device comprising:**

an encoder unit for outputting a stream, obtained by receiving and encoding a medium signal, to a transmission path (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is transmitted through a communication channel**).**

Although Salokannel teaches **encoder unit (**fig. 2 box 20**)** and **transmission path (**paragraph [0027]**)** and **outputting a stream (**paragraph [0027]**),** Salokannel is silent on **a control unit for controlling said encoder unit to change a compression rate thereof and output the stream, when a control signal is received from said transmission path.**

However, Harrell teaches a transmission side receives service adjustments, which may include changes in compression rate, from the receiving side (col. 3 lines 36-53) and the transmission side encodes using a plurality of different coding bit rates based upon a signal from the receiving side (col. 14 lines 4-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have a control unit for controlling said encoder unit to change a compression rate thereof and output the stream, when a control signal is received from said transmission path, as suggested by Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

As per claim 6, Salokannel teaches **a transmission/reception device (**fig. 2 shows a mobile terminal**) comprising:**

a decoder unit for decoding a stream received from a transmission path (fig. 2 shows a mobile terminal with an decoder unit 21; paragraph [0027], discloses decoder decodes encoded information received from a communication channel**);**

a buffer unit for storing a medium signal, decoded and produced by said decoder unit (paragraph [0031], discloses the decoded information is stored in the receiving buffer in the memory 13**);**

an encoder unit for outputting a stream, obtained by receiving and encoding a medium signal, to said transmission path (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode

information and then the encoded information is transmitted through a communication channel**).**

Although Salokannel teaches **buffer unit (**paragraph [0031]**)** and **transmission path (**paragraph [0027]**)** and **encoder unit (**fig. 2 box 20**)** and **outputting a stream (**paragraph [0027]**),** Salokannel is silent on **a first control unit for monitoring a storage amount of said buffer unit, said first control unit outputting a control signal to said transmission path, if the storage amount exceeds or falls below a predetermined threshold and a second control unit for controlling said encoder unit to change a compression rate thereof and output the stream, when the control signal is received from said transmission path.**

However, Harrell teaches a reception side transmitting service adjustments, which may include changes in compression rate, to a transmission side in response to the congestion levels detected by monitoring the buffer level and (col. 3 lines 36-53) and a plurality of zones corresponding to the amount of information stored in the buffer (col. 6 lines 22-45) and the transmission side encodes using a plurality of different coding bit rates based upon a signal from the receiving side (col. 14 lines 4-13)**.**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have a first control unit for monitoring a storage amount of said buffer unit, said first control unit outputting a control signal to said transmission path, if the storage amount exceeds or falls below a predetermined threshold and a second control unit for controlling said encoder unit to change a compression rate thereof and output the stream, when the control signal is

received from said transmission path, as suggested by Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

As per claim 21, Salokannel teaches **a computer program storage device, readable by a computer, tangibly embodying a program of instructions executable by the computer for transmitting a medium signal, said program comprising instructions that cause the computer to perform steps of (**paragraph [0031], discloses mobile terminal having a network controller containing program codes for operation**):**

outputting a stream obtained by receiving and encoding the medium signal, to a transmission path (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is transmitted through a communication channel**).**

Although Salokannel teaches **encoding (**paragraph [0027]**)** and **transmission path (**paragraph [0027]**)** and **outputting a stream (**paragraph [0027]**),** Salokannel is silent on **performing control to output the stream by changing a compression rate of the encoding processing when a predetermined control signal is received from said transmission path.**

However, Harrell teaches a transmission side receives service adjustments, which may include changes in compression rate, from the receiving side (col. 3 lines 36-

53) and the transmission side encodes using a plurality of different coding bit rates based upon a signal from the receiving side (col. 14 lines 4-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have performing control to output the stream by changing a compression rate of the encoding processing when a predetermined control signal is received from said transmission path, as suggested by Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

As per claim 25, Salokannel teaches **a transmission device (**fig. 2 shows a mobile terminal**) that receives information data, including audios and/or images, as an input (**paragraph [0026], discloses a microphone for the transmission of speech**), performs encoding processing of the input data, creates distribution data and distributes the distribution data via a wired and/or wireless transmission path (**fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is transmitted through a communication channel**), said transmission device comprising:**

Although Salokannel teaches **encoding processing (**paragraph [0027]**),** Salokannel is silent on **means for controlling an output in such a way that, when a predetermined control signal is received from said transmission path, a compression rate of the encoding processing is changed or the distribution data**

is output at a time interval different from a time interval at which the input data has been encoded by the encoding processing.

However, Harrell teaches a transmission side receives service adjustments, which may include changes in compression rate, from the receiving side (col. 3 lines 36-53) and the transmission side encodes using a plurality of different coding bit rates based upon a signal from the receiving side (col. 14 lines 4-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have means for controlling an output in such a way that, when a predetermined control signal is received from said transmission path, a compression rate of the encoding processing is changed, as suggested by Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

As per claim 26, Salokannel teaches **a reception device comprising means for receiving and decoding a distribution data distributed from a transmission device to a wired and/or wireless transmission path (**fig. 3 shows an access point containing a decoder; paragraph [0025], discloses communication between access points and mobile terminals; paragraph [0027] discloses encoder is used to encode information and then the encoded information is transmitted through a communication channel**).**

Although Salokannel teaches **said reception device (**fig. 3**), said transmission device (**paragraph [0025]**), a storage device in which the received data is stored**

(paragraph [0033], discloses memory 14, within access point controller, is used for temporary storage of received packets; paragraph [0025], discloses functions of the access point controller can be implemented on the access point**), wherein said transmission device (**fig. 2 shows a mobile terminal**) receives information data, including audios and/or images, as an input (**paragraph [0026], discloses a microphone for the transmission of speech**)** and **performs encoding processing of the input data, creates the distribution data and distributes the distribution data via the transmission path (**fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is transmitted through a communication channel**),** Salokannel is silent on **said reception device further comprising means for monitoring a status of a storage amount or a status of reception from said transmission path and, based on the monitor result, transmitting the control signal to said transmission device via said transmission path and said transmission device comprising means for controlling an output in such a way that, when a predetermined control signal is received from said transmission path, a compression rate of the encoding processing is changed or the distribution data is output at a time interval different from a time interval at which the input data has been encoded by the encoding processing.**

However, Harrell teaches a reception side transmitting service adjustments to a transmission side in response to the congestion levels detected by monitoring the buffer level (col. 3 lines 36-48) and a transmission side receives service adjustments, which

may include changes in compression rate, from the receiving side (col. 3 lines 36-53) and the transmission side encodes using a plurality of different coding bit rates based upon a signal from the receiving side (col. 14 lines 4-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have said reception device further comprising means for monitoring a status of a storage amount or a status of reception from said transmission path and, based on the monitor result, transmitting the control signal to said transmission device via said transmission path and said transmission device comprising means for controlling an output in such a way that, when a predetermined control signal is received from said transmission path, a compression rate of the encoding processing is changed or the distribution data is output at a time interval different from a time interval at which the input data has been encoded by the encoding processing, as suggested by Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

11. Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2001/0006552 to Salokannel and in further view of U.S. Patent 6,952,397 to Mor et al (hereinafter "Mor").

As per claim 2, Salokannel teaches **a transmission device comprising:**

an encoder unit for outputting a stream, obtained by receiving and encoding a medium signal (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is outputted**).**

Although Salokannel teaches **encoder unit (**fig. 2 box 20**)** and **transmission path (**paragraph [0027], discloses transmission through a channel**)** and **outputting a stream (**paragraph [0027]**),** Salokannel is silent on **an output control unit for receiving the stream output from said encoder unit, said output control unit performing control, when a control signal is received from a transmission path, to output the stream to the transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit.**

However, Mor teaches upon receiving a notification, delaying the transmission of traffic for a predetermined waiting period (col. 4 lines 19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have an output control unit for receiving the stream output from said encoder unit, said output control unit performing control, when a control signal is received from a transmission path, to output the stream to the transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit, as suggested by Mor. This combination would benefit the system by providing an improved communication method and devices for bidirectional networks (Mor col. 3 lines 5-8).

As per claim 22, Salokannel teaches **a computer program storage device, readable by a computer, tangibly embodying a program of instructions executable by the computer for transmitting a medium signal, said program comprising instructions that cause the computer to perform steps of (**paragraph [0031], discloses mobile terminal having a network controller containing program codes for operation**):**

outputting a stream obtained by receiving and encoding a medium signal (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is outputted**).**

Although Salokannel teaches **encoding (**paragraph [0027]**)** and **outputting a stream (**paragraph [0027]**),** Salokannel is silent on **when transmitting the stream after encoding, performing output control of stream, on receipt of a predetermined control signal from a transmission path, so that the stream is output to said transmission path at a time interval different from a time interval at which the medium signal has been encoded by the encoding processing.**

However, Mor teaches upon receiving a notification, delaying the transmission of traffic for a predetermined waiting period (col. 4 lines 19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Salokannel to have when transmitting the stream after encoding, performing output control of stream, on receipt of a predetermined control signal from a transmission path, so that the stream is output to said transmission path at a time interval different from a time interval at which the medium signal has been

encoded by the encoding processing, as suggested by Mor. This combination would benefit the system by providing an improved communication method and devices for bidirectional networks (Mor col. 3 lines 5-8).

12. Claims 4, 5 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2001/0006552 to Salokannel and in further view of U.S. Patent 6,473,411 to Kumaki et al (hereinafter "Kumaki").

As per claim 4, Salokannel teaches **a reception device comprising:**

a decoder unit for decoding a stream received from a transmission path (fig. 2 shows a mobile terminal with an decoder unit 21; paragraph [0027], discloses decoder decodes encoded information received from a communication channel**);**

Although Salokannel teaches **transmission path (**paragraph [0027]**),** Salokannel is silent on **a monitor unit for monitoring a wireless reception status of said transmission path and a control unit for outputting a control signal to said transmission path based on a notification from said monitor unit, if the wireless reception status indicates a handover status.**

However, Kumaki teaches a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message (col. 45 lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have a monitor unit for monitoring a wireless reception status of said transmission path and a control unit for

outputting a control signal to said transmission path based on a notification from said monitor unit, if the wireless reception status indicates a handover status, as suggested by Kumaki. This combination would benefit the system by making a re-connection when a communication is disconnected suddenly at a visited site (Kumaki col. 4 lines 4-5).

As per claim 5, the combination teaches **the reception device according to claim 4, wherein, when a wireless status of said transmission path indicates a handover from a current wireless area to an adjacent area, said monitor unit notifies the handover status to said control unit (**Kumaki, col. 45 lines 45-50, discloses a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message; col. 45 lines 32-36, discloses handoff is when mobile terminal moves from the radio base station to another radio base station**).**

As per claim 24, Salokannel teaches **a computer program storage device, readable by a computer, tangibly embodying a program of instructions executable by a machine for receiving a stream transmitted from a transmission device to a transmission path (**paragraph [0031], discloses mobile terminal having a network controller containing program codes for operation**) said program comprising instructions that cause the computer to perform steps of:**

decoding a stream received from said transmission path (fig. 2 shows a mobile terminal with an decoder unit 21; paragraph [0027], discloses decoder decodes encoded information received from a communication channel**).**

Although Salokannel teaches **transmission path (**paragraph [0027]**),** Salokannel is silent on **monitoring a wireless reception status of said transmission path and output a control signal to said transmission path, if the wireless reception status indicates a handover status.**

However, Kumaki teaches a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message (col. 45 lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have monitoring a wireless reception status of said transmission path and output a control signal to said transmission path, if the wireless reception status indicates a handover status, as suggested by Kumaki. This combination would benefit the system by making a re-connection when a communication is disconnected suddenly at a visited site (Kumaki col. 4 lines 4-5).

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2001/0006552 to Salokannel and in further view of U.S. Patent 7,274,661 to Harrell et al (hereinafter "Harrell") and in further view of U.S. Patent 6,952,397 to Mor et al (hereinafter "Mor").

As per claim 7, Salokannel teaches **a transmission/reception device (**fig. 2 shows a mobile terminal**) comprising:**

a decoder unit for decoding a stream received from a transmission path (fig. 2 shows a mobile terminal with an decoder unit 21; paragraph [0027], discloses decoder decodes encoded information received from a communication channel**);**

a buffer unit for storing a medium signal decoded and produced by said decoder unit (paragraph [0031], discloses the decoded information is stored in the receiving buffer in the memory 13**);**

an encoder unit for outputting a stream obtained by receiving and encoding a medium signal (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is outputted**).**

Although Salokannel teaches **buffer unit (**paragraph [0031]**)** and **transmission path (**paragraph [0027]**),** Salokannel is silent on **a first control unit for monitoring a storage amount of said buffer unit, said first control unit outputting a control signal to said transmission path, if the storage amount exceeds or falls below a predetermined threshold.**

However, Harrell teaches a reception side transmitting service adjustments to a transmission side in response to the congestion levels detected by monitoring the buffer level (col. 3 lines 36-48) and a plurality of zones corresponding to the amount of information stored in the buffer (col. 6 lines 22-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel have a first control unit for monitoring a storage amount of said buffer unit, said first control unit outputting a control

signal to path transmission path, if the storage amount exceeds or falls below a predetermined threshold, as suggested by Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

Although the combination teaches **encoder unit (**Salokannel, fig. 2 box 20**)** and **outputting a stream (**Salokannel, paragraph [0027]**)** and **transmission path (**Salokannel, paragraph [0027]**),** the combination is silent on **a second control unit for receiving the stream output from said encoder unit, said second control unit performing control to output the stream to said transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit, when the control signal is received from said transmission path.**

However, Mor teaches upon receiving a notification, delaying the transmission of traffic for a predetermined waiting period (col. 4 lines 19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have a second control unit for receiving the stream output from said encoder unit, said second control unit performing control to output the stream to said transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit, when the control signal is received from said transmission path, as suggested by Mor. This combination would benefit the system by providing an improved communication method and devices for bidirectional networks (Mor col. 3 lines 5-8).

14. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2001/0006552 to Salokannel and in further view of U.S. Patent 6,473,411 to Kumaki et al (hereinafter "Kumaki") and in further view of U.S. Patent 7,274,661 to Harrell et al (hereinafter "Harrell").

As per claim 8, Salokannel teaches **a transmission/reception (**fig. 2 shows a mobile terminal**) device comprising:**

a decoder unit for decoding a stream received from a transmission path (fig. 2 shows a mobile terminal with an decoder unit 21; paragraph [0027], discloses decoder decodes encoded information received from a communication channel**);**

an encoder unit for outputting a stream, obtained by receiving and encoding a medium signal, to said transmission path (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is transmitted through a communication channel**).**

Although Salokannel teaches **transmission path (**paragraph [0027]**),** Salokannel is silent on **a monitor unit for monitoring a wireless reception status of said transmission path** and **a first control unit for outputting a control signal to said transmission path based on a notification from said monitor unit if the wireless reception status indicates a handover status.**

However, Kumaki teaches a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message (col. 45 lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have a monitor unit for monitoring a wireless reception status of said transmission path, a first control unit for outputting a control signal to said transmission path based on a notification from said monitor unit if the wireless reception status indicates a handover status, as suggested by Kumaki. This combination would benefit the system by making a re-connection when a communication is disconnected suddenly at a visited site (Kumaki col. 4 lines 4-5).

Although the combination teaches **encoder unit (**Salokannel, fig. 2 box 20**)** and **outputting a stream (**Salokannel, paragraph [0027]**)** and **transmission path (**Salokannel, paragraph [0027]**),** the combination is silent on **a second control unit for controlling said encoder unit to change a compression rate thereof and output the stream when the control signal is received from said transmission path**.

However, Harrell teaches a transmission side receives service adjustments, which may include changes in compression rate, from the receiving side (col. 3 lines 36-53) and the transmission side encodes using a plurality of different coding bit rates based upon a signal from the receiving side (col. 14 lines 4-13)**.**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have a second control unit for controlling said encoder unit to change a compression rate thereof and output the stream when the control signal is received from said transmission path, as suggested by

Harrell. This combination would benefit the system by having congestion detection and flow control over packet networks (Harrell col. 1 lines 18-19).

As per claim 10, the combination teaches **the transmission/reception device according to claim 8, wherein, when a wireless status of said transmission path indicates a handover from a current wireless area to an adjacent area, said monitor unit notifies the handover status to said first control unit (**Kumaki, col. 45 lines 45-50, discloses a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message; col. 45 lines 32-36, discloses handoff is when mobile terminal moves from the radio base station to another radio base station**).**

Examiner provides the same motivation for the combination as stated in claim 8.

15. Claims 9 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2001/0006552 to Salokannel and in further view of U.S. Patent 6,473,411 to Kumaki et al (hereinafter "Kumaki") and in further view of U.S. Patent 6,952,397 to Mor et al (hereinafter "Mor").

As per claim 9, Salokannel teaches **a transmission/reception device (**fig. 2 shows a mobile terminal**) comprising:**

a decoder unit for decoding a stream received from a transmission path (fig. 2 shows a mobile terminal with an decoder unit 21; paragraph [0027], discloses decoder decodes encoded information received from a communication channel**);**

an encoder unit for outputting a stream, obtained by receiving and encoding a medium signal (fig. 2 shows a mobile terminal with an encoder unit 20; paragraph [0027] discloses encoder is used to encode information and then the encoded information is outputted**).**

Although Salokannel teaches **transmission path (**paragraph [0027]**)** and **encoder unit (**fig. 2 box 20**)** and **outputting a stream (**paragraph [0027]**),** Salokannel is silent on **a monitor unit for monitoring a wireless reception status of said transmission path** and **a first control unit for outputting a control signal to said transmission path based on a notification from said monitor unit if the wireless reception status indicates a handover status.**

However, Kumaki teaches a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message (col. 45 lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Salokannel to have a monitor unit for monitoring a wireless reception status of said transmission path and a first control unit for outputting a control signal to said transmission path based on a notification from said monitor unit if the wireless reception status indicates a handover status, as suggested by Kumaki. This combination would benefit the system by making a re-connection when a communication is disconnected suddenly at a visited site (Kumaki col. 4 lines 4-5).

Although the combination teaches **transmission path (transmission path** (paragraph [0027])**,** paragraph [0027])**, encoder unit (**Salokannel, fig. 2 box 20**)** and **outputting a stream (**Salokannel**,** paragraph [0027])**,** the combination is silent on **a second control unit for receiving the stream output from said encoder unit, said second control unit performing control to output the stream to said transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit, when the control signal is received from said transmission path.**

However, Mor teaches upon receiving a notification, delaying the transmission of traffic for a predetermined waiting period (col. 4 lines 19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have a second control unit for receiving the stream output from said encoder unit, said second control unit performing control to output the stream to said transmission path at a time interval different from a time interval at which the medium signal has been encoded by said encoder unit, when the control signal is received from said transmission path, as suggested by Mor. This combination would benefit the system by providing an improved communication method and devices for bidirectional networks (Mor col. 3 lines 5-8).

As per claim 30, the combination teaches **the transmission/reception device according to claim 9, wherein, when a wireless status of said transmission path indicates a handover from a current wireless area to an adjacent area, said**

monitor unit notifies the handover status to said first control unit (Kumaki, col. 45 lines 45-50, discloses a mobile terminal detects the degradation of a received signal strength and transmits a handoff request message; col. 45 lines 32-36, discloses handoff is when mobile terminal moves from the radio base station to another radio base station**).**

Examiner provides the same motivation for the combination as stated in claim 9.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHAU whose telephone number is (571)270-7152. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2476

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2476